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Perceived Fairness and Effectiveness of Rangeland Collaborative Processes

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PERCEIVED FAIRNESS AND EFFECTIVENESS OF RANGELAND COLLABORATIVE PROCESSES

by

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ABSTRACT

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by

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Utah State University, 1998

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Involvement in collaborative partnerships in natural resource management has become a popular method for natural resource management agencies to collect public input, cope with conflicts, and develop ecosystem management plans. This thesis evaluates various collaborative processes, emphasizing multiple-owner partnerships. Qualitative interviews of 46 landowners in Utah were conducted to reveal concerns and suggestions regarding multiple-owner landscape-level collaborative partnerships. Landowners were concerned about private property rights infringement and losing control of their private land. Landowners were primarily concerned about the fairness and effectiveness of any partnership in which they were involved.

However, they were willing to consider participating if certain procedural and

group composition elements were met: realistic goals; compromise or consensus-based decision-making; time efficiency; participant commitment, especially by public land management officials; more weight given to local concerns than non-local concerns; participant knowledge of local ecosystems; and respect among participants.

A follow-up study with participants of eight collaborative partnerships in four western states examined the importance of the procedural and group composition elements identified from the landowner interviews, plus one from a literature review, i.e., that participants feel that they have some control and/or a voice in the process. Analysis revealed that all but one of these elements – more weight given to local concerns – were associated with participants' perceptions that their partnership was fair and effective. These elements can be used as guidelines for emerging collaborative partnerships. Participants were overwhelmingly positive in their evaluations of their partnerships, suggesting that there are real benefits of using collaborative processes.

(117 pages)

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Kimberly Jane Richardson Barker

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CHAPTER I

INTRODUCTION

Ever since environmentalist John Muir fought to keep cattle and sheep off public land late in the nineteenth century, conflicts over the condition and use of public rangelands have been an issue of Western land management. Livestock grazing has been an integral part of the Forest Service and Bureau of Land Management (BLM) since those agencies' inception. The conflict, "a see-saw battle between the proponents of the preservation and the 'wise-use' of rangelands" (Dagget 1995, p. 2) and others, has prompted much discussion about the best way public land managers can incorporate societal values into their management activities.

Unfortunately,"by viewing resources as competing use interests, the model [used by public land management agency decision makers] is set up to breed conflict!" (Thomas 1995, p. 53). These competing users of public lands, who continually vie for the attention of public land decision makers, are often disappointed when their input appears to have had little or no impact on the ensuing management decision (Lyden et al. 1990). Blahna and Yonts-Shepard (1989) identified several reasons for the apparent lack of consideration paid to the *public* in public land management decisions, e.g., most public involvement occurs before and after decisions are made, the lack of representatives from all interest groups, and the one-way communication pattern of resource managers--perhaps to mollify public conflicts. Range managers themselves are beginning to recognize that they lack the experience and knowledge to

communicate with the public effectively (Banner et al. 1993; Butler 1995).

Because of this dissatisfaction with traditional land management decision-making processes, citizen, business, government, and natural resources management representatives have been experimenting with collaborative decision-making processes for two decades (Bingham 1986). The intent of these representatives is to seek out the common ground among the different interests, while recognizing value differences at the heart to the conflict (Crowfoot and Wondelleck 1990). The representatives often form groups or partnerships to address the complex nature of the land management decisions. An essential component of these collaborative partnerships is that participants--including public land managers, landowners, and environmentalists--"participate jointly in the decision-making process, maintaining ownership in agreements reached" (Walker and Daniels 1996, p. 82). All participants share the responsibility for decisions which, in practice, means that management agencies give up some discretion (Moote and McClaran 1997).

Collaborative partnerships that transcend land ownership boundaries are of special interest because every federal land management agency recently adopted "ecosystem management," (Grumbine 1997; Thomas 1995) a management philosophy that draws from principles of ecology, conflict management, ecological economics, and environmental ethics. Although ecosystem management is primarily a federal initiative, it is affecting, and will continue to affect non-federal land, mainly because of its fundamental focus on landscape-level management strategies. Jim

Baca, then Bureau of Land Management (BLM) director, testified that "the word *ecosystem* clearly implies some form of geographic delineation, one that crosses the traditional geopolitical boundaries by which we have managed our lands and resources" (Environmental News Network 1993, p. 1). Because most landscapes transcend ownership boundaries, ecosystem management can only work through multiple land owner cooperation, utilizing conflict management strategies and procedures to achieve an ecosystem plan for their lands which *together* constitute a wildland ecosystem.

While cooperation among private landowners, public land management agencies, and others is crucial to ecosystem management, it is not clear *how* to achieve it. In a report analyzing key problems confronting ecosystem managers, Brunson (1996) argued that "we do not know how to effectively manage ecosystems that cross multiple ownership boundaries, nor do we know the social implications of trying to do so" (p. 124). We do know there is widespread concern among private landowners and resource industries about their role in ecosystem management, and the change in federal resource management philosophy is widely disparaged by the growing private property rights movement (Banzhaf 1993; Lewis 1995; Thomas 1994).

Fortunately, there is some information for those interested in organizing or becoming involved in a collaborative partnership. Case studies of such groups

(Crowfoot and Wondelleck 1990; Dagget 1995; Yaffee et al. 1996), academic review of various groups and processes (Moore 1994; Shindler and Neburka 1997; Walker and Daniels 1996), and invitations to become involved (Anderson 1990; Cleary 1988; Holbert 1991; Krueger 1992; Phillipi and Cleary 1993; Swanson 1994; Torrell 1994) reveal several procedural elements researchers deemed important to "successful" collaborative partnerships in land management. This body of literature is very important to understanding how collaborative groups interact, and what types of procedures have worked in the past. Throughout the natural resource arena, existing groups are attempting to work together by utilizing a combination of these elements in various collaborative processes.

Although much has been written about collaborative groups, "negotiation of public disputes is carried on with few accepted guidelines and without established traditions" (Carpenter and Kennedy 1988, p. 242). This thesis provides information that is essential to the process of developing such guidelines for ecosystemwide collaborative partnerships, particularly in rangeland settings. Fundamental to these partnerships are the individual participants who give their time and energy, often overcoming negative stereotypes, attempting to develop combined objectives. However, we do not know if partnership participants feel the process with which they are involved is fair and/or worth their time and effort. Past research has focused on "successful" partnerships, defining success on elements such as longevity of the group (Cormick 1976) or the realization of the goal(s) for which the group was established

(Shindler and Neburka 1997). This thesis goes beyond these expert judgment approaches to focus on the participants themselves to investigate if they think the process is fair and effective.

In a two-part study, this thesis examines collaborative, multiple-owner partnerships, focusing on rangelands and rangeland owners. Since there is no known research examining rangeland owners' reactions to ecosystem management and collaborative decision-making, a qualitative approach to the first phase of this study was appropriate. A "grounded theory" method (Strauss and Corbin 1990) was used to gather landowners' underlying opinions concerning ecosystem management and cross-boundary partnerships. The second part of this research is quantitative, verifying data collected in phase one.

The first phase of this research was conducted in rural Utah, where some counties have up to 90% federal land. These counties have been under increasing pressure due to conflicts with recreation and environmental interests. These groups often publicly discredit the local ranching industry, claiming that cattle and sheep severely degrade land qualities of the areas. To identify how rangeland owners would feel about including their land in a plan developed by a collaborative partnership involving these federal land managers and environmental stakeholders, semi-structured interviews were conducted.

Phase two studied collaborative groups from Utah and several surrounding states where land ownership and management has a similar mix of public and private

land. This phase involved participants of existing cross-boundary collaborative groups. Participants were sent a survey asking for their evaluation of elements identified by landowners in phase one. Determining the level of fairness and effectiveness perceived by respondents was the central component of this second phase of research.

Chapter II of this thesis reports the findings of the qualitative research. Landowners responded that they would feel comfortable being involved in a multi-owner collaborative partnership if they felt the group was operating fairly and effectively. They identified specific key elements they felt were necessary in any cross-boundary partnership involving private land. Chapter III of this thesis expands on these ideas, describing the quantitative research on the perceived fairness and effectiveness of those participating in such cross-boundary plans. This follow-up research found that participants of collaborative groups feel they are successful. Most of the elements identified by landowners closely related to their perceptions of fairness and effectiveness. Chapter IV discusses these findings, the implications for groups currently meeting and those beginning soon, and the challenges yet to be faced with the implementation of ecosystem management.

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CHAPTER II

ISSUES AND PARTNERSHIP OPPORTUNITIES FOR UTAH'S PRIVATELY OWNED RANGELANDS

Abstract

Ecosystem management has provided several challenges to public land managers. Its emphasis on landscape-level management schemes is of particular concern because it requires participation from private landowners. The growth of wise-use movements around the country suggests that many landowners may feel ecosystem management is an unwelcome encroachment on their private property rights. Through qualitative interviews with Utah landowners, this research explored landowner concerns with ecosystem management and their suggestions regarding collaborative efforts in which they potentially may be involved. Landowners fear they will lose control of their land with the additional ecosystem management regulations, but most were willing to try collaborating with their neighbors, public land managers, and environmentalists. Landowners identified seven procedural and group composition elements that they would consider important in a fair and effective collaborative process: realistic goals; compromise or consensus-based decision-making; time efficiency; participant commitment, especially by public land management officials; more weight given to local concerns than non-local concerns; participant knowledge of local ecosystems; and respect among participants.

Introduction

Federal land management agencies in the United States currently guide their activities by the principles of a relatively new philosophy called "ecosystem management," which draws on elements of ecology, conflict management, ecological economics, environmental ethics, and other relevant disciplines. A major effort of ecosystem management is to incorporate a wider range of societal values into a multiple-use management framework. While ecosystem management began as a federal initiative, it has been at least partially adopted by some non-federal agencies. It also has the potential to affect non-federal lands in several other ways, primarily because of its emphasis on landscape-level management strategies. Ecosystem management strategies can work best if there is cooperation among landowners and federal land management agencies whose properties together constitute an ecosystem. In Utah, where two-thirds of the land is federally managed, it is difficult to imagine an ecosystem-scale project that would not involve public agencies and private landowners, either because citizens own land that is part of an ecosystem or because they hold permits for grazing or other activities on public land within the ecosystem.

While public/private cooperation is crucial to ecosystem management, it has been difficult to achieve in this era of public antagonism toward federal bureaucrats. In an analysis of key problems confronting land managers at the adoption of ecosystem management, Brunson (1996) argued that "we do not know how to effectively manage ecosystems that cross multiple ownership boundaries, nor do we

know the social implications of trying to do so" (p. 124). To create functional cross-boundary stewardship, partnerships will have to accommodate the conflicting human motivations of maintaining territories for individual and group improvement and cooperating with others in communities (Brunson, in press).

Agencies and professional organizations have devoted considerable time discussing alternative means for achieving cross-boundary cooperation. However, before embarking on such partnership efforts, it may be useful to know how affected landowners would *prefer* to participate--or if they would prefer to do so at all. This chapter describes research that identified and measured reactions of private rangeland owners in the state of Utah to ecosystem management--focusing on collaborating with neighboring landowners and public land managers to develop ecosystem management plans. To better understand the concerns of rangeland owners about including their land in a landscape-level management effort and their opinions regarding potentially getting involved in a collaborative partnership, rangeland stakeholders in six Utah counties were interviewed early in 1995.

The Private Property/Wise-Use Movement

The change in federal resource management philosophy to ecosystem management has been widely disparaged by the growing private property rights/wise-use movements (Lewis, 1995; Thomas, 1994). Members of these movements accuse federal agencies of imposing unreasonable enviromental regulations on land they lease

and own. These ideas are encouraged by stories of federal agents taking individuals' money, land, property rights, and sometimes lives (Lewis, 1995). Unlike many enviromental organizations, the wise-use movement is not "held together by formal national organizational leadership.... Wise-use is a local movement driven by local concerns, not national issues" (Wilson, 1997, p. 464). Lewis (1995) identified several reasons why the property rights/wise-use movement has become so popular in the 1990s, such as reactions to new enviromental regulations, widely dissimilar views of land use between urban and rural communities, increasing population putting a strain on limited resources, and the fear that ecosystem management will consider private land part of federally managed ecosystems, and thereby subjecting private land to additional regulations.

The mistrust of many rangeland owners may come from negative interactions with federal land mangers in the past. In an essay asserting that the biggest problem facing range managers is communication, Butler (1995) said many range managers "fear" the ranching community and "prefer to avoid confrontation," (p. 44) and not interact with ranchers. He also said that "ranching constituents are the most difficult and challenging in which to communicate" (p. 43). Davis and Davis (1988) found that grazing permittees are the group of land users least attuned to public land managers. Additionally, Xu and Bengston (1997) found that, in general, many natural resource professionals lack understanding of the values of many constituencies. This may result from the traditional education-oriented, one-way communication by federal

agencies (Blahna and Yonts-Shepard, 1989; Burnside and Rasmussen, 1997), the lack of interpersonal skills of range managers (Banner et al., 1993), or the inappropriate focus on natural resource "stuff," rather than social values (Kennedy et al., 1995, p. 132).

Issues Associated with Participating in Collaborative Processes

The property rights/wise-use movement and the lack of positive interactions with federal land mangers are two potential obstacles in implementing landscape-level, multiple-ownership partnerships for ecosystem management. Research examining public reactions to ecosystem management in non-rangeland settings found that ecosystem management opponents in the Northwest often voiced concerns about uncertainty and risk (Brunson, 1993). Some critics suggested that new policies and practices posed unanticipated dangers to amenity values, land health, or corporate profits. Others worried more about who might suffer those risks: Would changes come at the expense of small business or private landowners, or would costs and benefits be spread more evenly?

Potential risks differ from region to region. Concerns in the Northwest centered on logger safety, reduced timber income and supply, forest scenic quality, and loss of political influence by some constituencies (Brunson, 1996). Fisher (1993) noted different concerns about ecosystem management in Indiana, where only 5% of the land is publicly owned: agency jurisdiction over ecosystem management, financing

new state agency programs in an era of tax revolt, and maintaining participation among diverse private constituency groups. People living in the Intermountain West will probably perceive different risks associated with ecosystem management, and its patchwork land ownership pattern will doubtlessly require public-private land cooperative plans. Risks to participants in these plans may include loss of private property options in order to achieve public objectives, reduced opportunities to graze, log, or mine on public lands where highly valued amenities may be found, and others.

Means of Encouraging Participation

Researchers have considered other aspects of public/private collaboration in ecosystem management. An economic analysis by Daniels (1993) has shown that market forces will not, by themselves, encourage private sector participation in ecosystem management. Benefits of ecosystem management--biodiversity, aesthetics, rural job-creation, reduced carbon dioxide emissions--rarely accrue to the landowners who must make the required investments. If the risks are borne by landowners while the benefits accrue to the rest of society, other means must be employed to encourage landowner cooperation. Many approaches are likely to be considered to motivate landowners toward ecosystem management, including the two most common: regulations and incentives (Lippke and Oliver, 1993).

In a Utah rangeland context, regulations might include mandates for rest-rotation grazing systems or riparian grazing exclusions, or restrictions on conversion

of shrub lands to grasslands. Under ideal conditions, the cost of such mandates could be passed on to consumers through near-uniform price increases; however, initial costs may be difficult for Utah ranchers to bear given the historically low rates of return on ranching investments in the state (Workman and Evans, 1993). Brunson et al. (1996) found that landowners preferred tax incentives, free technical assistance, and financial assistance over regulations as encouragement to participate in collaborative partnerships. Campbell and Kittredge (1996) found that financial incentives were vital in introducing a voluntary ecosystem management approach with nonindustrial private forest owners (NIPF). Incentive approaches to encourage rangeland stewardship include Box's (1993) proposal to tie variable public-land grazing fees to rangeland health. Another idea is to eliminate the USDA emergency feed program, because administrators of the program have been condemned for encouraging ranchers to overstock, rather than keeping herds small enough to survive years of poor forage production (Hess and Holechek, 1993).

Although economic incentives or disincentives are factors determining ranch owners' behaviors and potential participation, ranchers are more likely to make decisions based on maintaining their "way of life" (Bartlett et al., 1989; Grigsby, 1980) and their ties to the land they own (Smith and Martin, 1972). To most ranchers, regulations are not a tenable approach to management. Education and technical expertise have also been found to ease the transition to new management

practices in private forests (Campbell and Kittredge, 1996). These studies suggest that, in range management, different educational strategies need to be directed toward different types of landowners based on age, education, size of operation, etc. (Huntsinger and Fortmann, 1990).

We are learning, however, that private land owners, although apprehensive, they may feel comfortable entering their land into collaborative partnerships under certain conditions. Research among private forest owners in Utah and Indiana (Brunson et al., 1995) shows that even if people believe they have been losing their property rights, they may be willing to participate in ecosystem-level partnerships as long as those rights are explicitly protected during the collaborative process. Up to a quarter of the respondents said they would "definitely be interested in joining" a collaborative partnership (Brunson et al., 1996). Roughly half were intrigued, but wanted more information before becoming involved themselves. About three quarters of the respondents felt that cross-boundary management was appropriate among public forests. The percentages dropped roughly a fourth when they were asked about an ecosystemwide partnership that included their private land.

These positive responses of landowners to potential involvement in multi-owner partnerships provide hope for federal natural resource managers as well as for support ecosystem management proponents who suggest that landowners' economic and personal needs can be successfully met if all affected interests participate in a process that identifies situation-specific restrictions or incentives. Cooperative land

management efforts have been reportedly successful in some areas under a variety of approaches. In rangeland situations, the most commonly used process is called Coordinated Resource Management (Phillipi and Cleary, 1993; Swanson, 1994).

Method

In order to accurately tap the "world view" (Brandenburg and Carroll, 1995) of Utah landowners, qualitative inquiry was used. A qualitative method, while less precise than quantitative approaches (Neuman, 1994), was chosen for two reasons. First, since this was the initial examination of this topic, there was insufficient information to direct a more structured study. Moreover, there were distinct advantages of compiling data in the words of the respondents. It let us understand the subjects' framework for *their* interpretation of ecosystem management, revealing textual information about reasons, underlying meanings, opinions, and values that surveys cannot (Marshall and Rossman, 1989).

The research design was based on grounded theory (Strauss and Corbin, 1990), an inductive method where a theory emerges as data collection continues. The field researcher did not approach the project with a precise hypothesis to be tested. Rather, hypotheses were developed and challenged as the interviews progressed.

The data were analyzed using open, axial, and selective coding methods outlined by Strauss and Corbin (1990). *Open coding* names and categorizes responses so that similarities and differences can be examined. *Axial coding* takes

categories derived from open coding and attempts to discover relationships or links among them. Ultimately, the intent of axial coding is to indicate the conditions that give rise to a category. The last step is *selective coding*, where one concept is selected as the core category or pivoting issue that explains some concepts and categories. As patterns developed, the interviewer tested the emerging findings with the existing data and the remainder of the respondents to see if they remained plausible. The working theory was then tested against respondents' answers to "ground" the theory in the data available.

The interviews were completed by one field researcher within a 3-month period in January-March, 1995. Interviews typically lasted 1 hour, but ranged from a half hour to 4 hours. An interview guide (see Appendix A), with fixed-question, open-response format was used to organize the interviews (Weiss, 1994). Unscheduled probes were also used, allowing the interviewer to engage more in a conversation than in a rigid question-answer pattern. In most cases, interviews were tape recorded to produce the most accurate representation of respondents' own words.

Interviews were conducted in six rural Utah counties (Beaver, Duchesne, Piute, San Juan, Sevier, and Uintah) chosen to encompass a range of biophysical and social environments. Each county is economically dependent on natural resources and was experiencing conflicts over water, recreation, or grazing management. Selection of interviewees was guided by a combination of key informant and snowball

sampling. Individuals selected for initial interviews were suggested by Utah State University Extension agents for their respective counties. The agents were asked to suggest respondents who were opinion leaders and, where possible, fell into five different economic classes of ranch owners identified by Birkenfeld (1994), who had found that attitudes toward adopting range technologies varied with percentage of family income derived from ranching, the extent of use of public lands for grazing, and employment of non-family laborers in a ranching operation. During the initial interviews, respondents were asked for names of other informed and/or influential people who may participate. However, in almost all cases, the people named were already scheduled for an interview or were unavailable. Forty-six individuals were interviewed.

Results

Respondent Characteristics

The largest category of respondents (26%) fit in Birkenfeld's (1994) "baron" category, persons who hire over 50% of ranch labor outside the family. This is not surprising since we were seeking ranching opinion leaders, who may be more likely to have large livestock operations. About 60% of interviewees said ranching was their primary source of income, while 26% relied on an outside income for the majority of the household expenses. One did not run livestock on his land. Although Birkenfeld found differences in management decision criteria and philosophies across landowner

categories, we found little variation in responses across categories or counties.

Landowners' Concerns about Ecosystem Management

Interviews focused mainly on landowners' concerns about the ecological boundary component of ecosystem management. The rights of private property were of great concern to them. Most did not trust the federal land managers, and did not want any more regulations imposed on them. Although they were concerned over this management change, most were willing to try it. They recognized its ecological validity and saw it as a potential improvement over the current land management and public input approach they found frustrating.

Many private landowners agree with the concept of ecological boundary management, yet they said the practice of it can be frightening. For example, they said they realize that "elk don't recognize boundaries, they [the elk] come onto my land and eat my feed," yet they do not want to lose any more rights associated with land ownership. Maybe "they'll [federal land managers or environmentalists] find an endangered species or something on my land. It will turn into a big mess."

> I'm sure a lot of people are scared.... They are afraid of who will come in and what kind of demands will be put on their area. If certain people see what they have, then regulations will follow.... Maybe someone will apply a law that they didn't know about and take away their right to use it.

Many respondents believed simply that people with private land should be able to do anything they want to it. As one interviewee said:

> The further you get from the city, the less people think private property matters. That is not true. I don't tell people what flowers to plant in their yard. Why do they think they can tell me what I should or shouldn't do [on my land]?

A pervasive idea among landowners was that ecosystem management is "another ploy" from the federal government to take private land or deprive them of their rights. When asked why they distrusted the federal government so intensely, most responded with an example of how they personally had been lied to or prevented from doing something that would help their operation. Others named "victims" of government whom they knew or had heard about, such as Randy Weaver or Wayne Hage. Many believed that the change in management was a way to increase intervention in their operations. One landowner said, "Ecosystem management is merely another war on words to try to get even more bureaucrats involved in land management." Another said, "Ecosystem management means all the agencies trying to get together and create a plan so agencies can try to get their way."

> I think it is another way to expand government and increase governmental spending to justify more jobs and increase regulations and take more freedoms away. Every time the government tries to "improve" things, that seems to be the end result.

Almost every landowner expressed that he or she was "sick and tired" of the "unreasonable" regulations (e.g., wetlands, endangered species) placed upon them and some see ecosystem management as another attempt "to make a lot more regulations" and to control "even more of their lives."

The issue of control is important in this discussion. Whether the pressure is

from the government or environmental groups, landowners feel they may lose control through ecosystem management. Some believe that the "feds fabricate problems [endangered species, erosion problems] to further control" or that "the bureaucrats are just looking for another way to stop multiple use and get control of private lands." A respected county agent told us, "If the owners don't agree with what is happening and they feel their land is taken away, we could have a civil war on our hands. There is that much distrust." Some of the landowners expressed fear of ramifications if they did not participate. One landowner said, "I [dare not] cooperate. Things [may] go on that will not be good for me, so I feel obligated to protect myself." Another felt that ecosystem management was "that the federal government will take over the management of private land. They can do that by regulations that have been, and will be, created through intimidation and fear."

A few respondents said if this federal control gets in the wrong hands, it could lead to the nation's freedoms taken away. "Private property is about freedom. I don't want to lose my freedom," said one respondent. Some feel the politicians or federal agencies are at fault. For example, one landowner said, "If we don't have private property, we don't have a country. The government can't have someone telling you what to do. If we lose private property rights, we'll lose the whole nation."

Others felt additional management was unnecessary. One individual said, "Really, private ground is being managed about as good as it can be right now." There was a strong sense of resentment that ranchers are "guilty until proven

innocent" concerning proper management of land. They rejected criticism of their land management, saying they would lose their jobs if they did not manage sustainably. There are other economic concerns, such as paying off loans. "As a private landowner, you are always spooked if you're going to have some government entity come in and manage the land you are trying to pay a mortgage on."

Another concern was that monitoring of ecosystem conditions would lead to encroachments on private lands and property rights:

> It makes me nervous. They can't manage an ecosystem without infringing on the private landowner. I don't want the enemy [referring to The Nature Conservancy, who had volunteered to monitor on behalf of the National Biological Service] to come on my ground and tell me how to manage it.

With all this antagonism, landowners still spoke of hope when they talked of their land and impending management changes. They liked the idea of working together as an alternative to public hearings and law suits. One respondent said, "I believe you can accomplish anything if you work in a partnership. You can have respect for each other while addressing different needs." This positive sentiment was not uncommon during the interviews. Despite their general apprehensiveness, some respondents were eager to try it, citing emotional benefits as well as improved stewardship. One landowner felt that "if we work together, we'll be a lot better off. The more people, the better ideas you have." Another said, "You can't control erosion on your own place if your neighbor about you has stripped the land. It will eat your good ground. Working together would be a good deal." The strongest

supporter of collaboration was a social worker who raised cows as a family hobby. He said frankly, "Collaboration makes a whole lot of sense to me. But ranchers have the hardest heads in the world. The idea will have to be their own, not someone else's."

Landowners' Ideas on Collaboration

The discussion of collaborative decision making was dominated by issues of local participation, feasibility, efficiency, and federal land management commitment. Respondents wanted to be assured that there would be commitment by all participants to accomplish things rapidly and efficiently. Some landowners were hopeful that collaboration would work if all participants were "reasonable." These ideas were isolated into eight elements that they felt would be necessary for them to feel comfortable with ecosystem management collaborative efforts involving their private land. There elements are discussed in detail below.

Realistic Goals. Feasibility was very important to landowners. Unless they felt that the group's goals and plans were reasonable, they would be hesitant to participate. They said they knew what the land was capable of doing, and the environmental constraints of the area.

> The objectives have to be realistic. We have to manage natural resources with common sense guidelines. We have to know what is possible for the land and one individual in the group can't have unrealistic objectives. We can't make this place [Southern Utah] look like Missouri.

Realistic objectives meant that the group look at the conditions for each "ecosystem" and manage "on a case by case basis." They were proud of their unique areas, and felt that management should reflect each specific place. "Every drainage and ridge is different. You just can't set general guidelines and alternatives for an entire county."

Landowners also felt that economic and social factors should be considered when managing land. One of their main criticisms of the environmentalists was they do not think that humans were part of ecological processes and ecosystems. This was seen as extremely unrealistic, because humans both impact land for enjoyment and use resources to live.

> Most people don't consider man's presence enough. Everyone has a romantic view of more of what they think [the landscape] should be with [movies like] *Dances with Wolves*...they want to see [wildlife] in the wild and go back to jobs. But they don't realize that just driving out there had an influence on the area and deer and other things.... People, and their influence, have to be considered. [We use] resources--eat, wear clothes. We have to use the land to its potential without destroying it.

Most landowners also felt that managing for one species, e.g., through the Endangered Species Act, was not reasonable, nor was it ecosystem management. One person said that all "people are tunnel visioned, only looking at one aspect or interest." One landowner acknowledged ranchers were guilty of this too, "There are some people who only consider the grass for their cows. [They] want everything out there for themselves."

Compromise and Consensus. There was a strong sense among landowners

that getting together to discuss issues and differences was much better than what they were currently doing. One said frankly, "I'd rather work face to face than write letters." Another said, "I don't want to just argue. If they have a desire to reach a consensus--and willing to listen to the other side--hopefully I would be willing to do the same thing." Because they always feel outweighed or outwitted, many did not want a voting situation in a collaborative group. "It would work if there were no votes, only compromises." They often felt outnumbered in public input hearings, so their opinions were not considered as important as "wilderness advocates," for example. "I feel like I am one person," said one landowner when talking about public input. He felt that if he wrote a letter opposing an action, "Someone else would write 10 letters for it." Some also worried that they were not as "book-learned" as their counterparts, so their opinions and letters would not be considered as convincing. "Will ecosystem management give us a say?"

Time Efficiency. Most respondents felt that the opportunity cost of meeting time should be an important consideration when setting up and conducting collaborative groups. This was especially true for the 37% of the interviewees who held other jobs. For many respondents, "time is a scarce resource" and should be spent as efficiently as possible, "not wasting time eating punch and cookies." Another said, "Farmers and ranchers don't like to sit in meetings. We like to get things done. We'd much rather be out fixing a fence than planning what should be done. The meeting can't keep us away from our fences."

To many respondents, ranching is an emotional investment. They spoke of sacrifices and trade-offs between time and money. One individual had delivered two premature still-born calves the morning of his interview. He frankly stated,

> Sometimes we're not up to all these meetings mentally, especially if we are wondering if a baby calf is dying in a snow bank. That kind of thing not only makes us sad, we [also] lose money.... If there is going to be participation, it has to produce more than whatever is being sacrificed to do it. It will be tough to recoup $1,000 [the current approximated price of selling a calf] in some meeting.... You have to realize that we will be having days like today.

Public Land Management Agency Commitment. Coupled with the issue of time is a concern about agencies' commitment to the decisions made by the collaborative group. There was great concern that people would diligently work to reach a decision only to have it filed away unnoticed. Some, like these individuals, had heard of other groups where recommendations had not been followed: "I've heard of these meetings taking place, but I also know that none of the management has changed. There was no commitment to the decisions." Another stated, "If they follow through and do what they intend to do, I can see some real merit out of the committee. But if they are just forming the committee to have a committee, then we'll be just wasting our time."

> The recommendations of other committees haven't been followed. Things like that bother me about this stuff. Who will this group answer to? Where will their recommendations go? Will there be any assurance that the information given will be used?\

> Who will that committee answer to? Would the decisions go anywhere? The RWAC's [Regional Wildlife Advisory Council]

> recommendations were not followed. That really bothers me. If you take people's time, their recommendations have to be taken seriously.

Others did not believe that the agencies would truly be able, either legally or logistically, to listen to recommendations or work together:

> The Canyon Country Partnership [in eastern Utah] is trying to get agencies together, but no one is willing to give up authority or control of any land to another agency.... The BLM can't legally give up their authority of their land. I don't think they should ask us to give up any more authority than the BLM can.

> They [federal agencies] make all these big statements, but never get any funds to do anything. A lot of what they say is rhetoric. The problem is they try to please everyone, so they please no one.

Along with serious consideration of group recommendations, respondents said they wanted to see evidence of negotiation "in good faith." The majority felt that the current NEPA process of public comment was a waste of time, because they felt the decision had already been made, "and they are just trying to appease us."

> I wouldn't mind being involved if I thought it would do any good--basically, if the decision hasn't already been made. I don't think the agencies want help or input. If I ever felt they did, I'd be glad to give it.

Local Participation and Influence. Respondents generally felt that most, if not all, participants should live near the area of concern. Not only were people from outside the state (e.g., California and New York) not welcome, but a majority felt that even Salt Lake residents live too far away to understand the issues and concerns of rural communities:

> Things should be managed by the people who are acquainted with the

> area. I think our own people in the area do a much better job in taking care of lands than outsiders. If there is good multiple-use management, the cattleman, sportsman, and hiker can work together.

Another reason for seeking local participation was that it allowed for more work on-site:

> Middle ground can be found if you keep them [the groups] as small and local as you can. Everyone has a different philosophy on life, but it would be OK if they'd do some homework and knew the situation. Going out on the ground would be the best.

There was overwhelming agreement that local issues and concerns were more important than those of environmentalists, recreation users, or "some guy from New York." Economic justification was generally given for this belief, which was often characterized as fairness issue. Some respondents adamantly adhered to the "home rule" ideology that counties should take precedence over any other governing body. One landowner said, "Input should be [weighted according to] percent of ownership. A hiker who visits once a year shouldn't have near as much to say about the management of land as the guy who owns it." Another stated, "I want to stop everyone with a 32-cent stamp from having the same voice as me. Maybe this is the way to do it. We give to the state [taxes, food] and they [environmentalists] take from it."

> Grazing allotments and land are people's livelihood. They have more interest in them than someone who wants to hike through. Their input ought to have more weight. But, currently, that hiker has just as much weight as those who have their lives invested in the area.

Knowledgeable Participants. Coupled with the "local control" attitude was

the idea that those involved in the decision-making process should have direct knowledge of the land in question. This feeling was typified by the respondent who said, "We know more about this land than some new Range Con[servationist] from Pennsylvania."

> You just can't have any person off the street show up. The people ought to have some knowledge about ecosystems, holism, and economics. Just loving the land and wanting to preserve it isn't enough.
>
> I'm hung up on people having input on a plan like that without any experience on the ground. They need to understand how to apply information. Collaboration needs to be done. If the group could put out their ideas on how to use the different aspects of that land, there could be [written] guidelines for everyone to follow.

Committed Participants. Landowners wanted the people with whom they would be working to be committed to the process. They wanted everything to be fair, and that everyone would be "bound by the decisions" made by the group. They wanted everyone to be as dedicated as they are, if not more so. One said, "I don't want to waste my time unless I see they [environmentalists, federal land managers, recreationists] are really trying to work things out."

Some were concerned that people would not be as dedicated as they are to the goals of healthy land because either 1) some people may only be there to "further their own agenda," 2) not everyone is economically invested in the area (except landowners and some others), or 3) landowners may not want to give up their own property rights: "How do you get enough commitment from the individuals in the

group that they will try to make it work without usurping too much of their prerogatives over their area?"

Mutual Respect. Despite their reservations, more respondents felt that compromise was one of the best ways to deal with conflicts in their area. At the same time, they wanted assurances that all sides in a conflict would concede equally, especially since they saw themselves as the group with the most to lose. "I used to think the real answer was to just sit down and talk with people. But it is always giving from our end. All they [the environmentalists and federal agencies] do is take."

> If a committee is to work like it ought to, the people involved need to be able to look at things realistically and be able to give a little bit. One person or group shouldn't have to give everything up, including the Forest Service.

Many respondents felt that if "reasonable people" were involved, the participants could maintain respect and accomplish predetermined goals. Some offered names of specific people they felt would represent them fairly. "Reasonableness" was defined in terms of honesty, open-mindedness, respectfulness, and deliberation.

> The people ought to exercise good judgement. I know that is subjective...but somebody who has some sense and who knows there are trade-offs and costs to everything, and doesn't expect the world to be ideal--someone who is willing to work with what is here, and willing to work with nature...[which] works awfully slow.

Small Groups. A majority of those interviewed said that if a collaborative

group were to produce foreseeable results, the number of people directly involved as participants would have to be small--"the smaller the better." They believed that larger groups lead to greater problems because of potential personality conflicts or simply the logistics of getting more people to agree on agendas and actions.

Discussion

Private property was probably the most volatile issue in rural America in 1995, the year the interviews were conducted. Consistent with the findings of Wilson (1997), we found that the combination of intense distrust of the federal government and fear of losing property rights has led to serious misgivings about ecosystemwide management from its outset. The loss of control over their private property was the main concern among landowners we interviewed. They worry that they will not be able to manage their land in the way they have become accustomed. Brunson (in press), validating this concern, writes, "Cooperation among adjoining landowners is possible only if private landowners are *willing to cede some control* over their defended territories to the larger partnership" (emphasis added).

However, Brunson et al. (1996) found that NIPF owners were generally "quite positive" toward applying ecosystem management to public forests as well as their private lands. We found this to be the case with Utah rangeland owners as well. Most Utah ranchers are tired of conflict and are more than ready to try alternative approaches to resolving disputes over rangeland issues. Many saw ecosystem

management collaboration as a much better way to get their own views incorporated into management decisions. Our findings suggest that there is hope for productive collaboration between landowners, government officials, and other interest groups.

Many respondents said they would participate if they felt their input was appreciated and used. This is consistent with criticism by other authors, who identified such public involvement flaws as ignoring the input of stakeholders (Lyden et al., 1990; Tyler and McGraw, 1986) and asking for their opinion after a decision has been made (Blahna and Yonts-Shepard, 1989; Lind et al., 1990). Sharing decision-making authority with *all* participants is an essential principle of collaboration (Moote and McClaran, 1997; Walker and Daniels, 1996), and interviewed landowners wanted insurance that public agencies would hold to their promise to *collaborate*.

Even though landowners were generally amicable toward the idea of collaboration, they were wary of how it would affect them directly. Their primary concern was fairness. Most landowners said they did not trust federal and state agencies to treat them fairly, and expected nothing different from ecosystem management or CRM programs, if they operated like "business as usual." Landowners also wanted the group with which they were involved to be effective. They wanted the ideas and management schemes developed in their group to actually be applied "on the ground." Data analysis revealed nine key elements landowners felt were essential to a "fair" and "effective" process. These elements can be broken into

two categories: (1) procedural and (2) group composition preferences. Rangeland owners saw each of these categories as important for them to feel the process was fair and effective.

Procedurally, respondents wanted the goals to be realistic involving only small, local areas. Respondents recognized that a compromise and consensus approach to decisions, as opposed to voting or lobbying was the fairest method to address various interests. Consensus approaches have also been advocated by Krueger (1992), Holbert (1991), and Cleary (1988). Landowners also wanted the time dedicated to such groups spent productively. And, most importantly, respondents wanted a strong commitment from the public land management agencies involved. In essence, they wanted the decisions made in the group to "go somewhere" and/or "mean something." This dedication by decision makers was also recommended by Swanson (1994) and Holbert (1991).

The composition and dynamics within the group seemed important to our respondents. Most notable, the landowners felt the group should completely consist of local people, or--at the very least--more weight should be given to local concerns. They also felt that things would only get done if the groups were kept small (8-10 people). They wanted people who knew either about ecological processes of their area or how to practice "good range management," not "someone off the street who has an opinion." They wanted to work with people who were committed to the process, land, and decisions made. They also said that participants should have

respect for all other participants.

Conclusions and Implications

Despite political and attitude shifts regarding land uses, it appears that ecosystem management in some form is here to stay. Concerns such as forest and range health remain critical, and pressure from non-commodity interest groups is only likely to increase. Forest Service Chief Jack Ward Thomas, in an address to range scientists, argued that "by viewing resources as competing use interests, the [previous model of resource management] is set up to breed conflict!" (p. 53). He argued that only a slimmed-down Forest Service could operate efficiently was with a model of *collaborative* multiple uses, i.e., a brand of ecosystem management (Thomas, 1995).

This means rangeland owners must be willing to collaborate with the agencies. Yet, while our Utah respondents agreed in principle with the fundamental objective of ecosystem management--healthy land--they also were wary of its potential ramifications: new regulations, further restriction on commodity uses, decreased stocking rates, changes in administrative jurisdiction, loss of control, and other issues. Ranchers are apprehensive, thinking they may have even less control over their land and livelihoods than they currently feel they have. Whether this is due to a distrust of federal government, personal experience, or propaganda, these concerns have become associated with ecosystem management and need to be

confronted directly in any information distributed to affected landowners.

The issue of property rights is especially problematic due to its political volatility and its position at the heart of ranchers' attitudes toward their livelihoods. Because many federal and state agencies are inherently distrusted, inquiries about collaborative efforts might benefit from participation by parties seen as knowledgeable but somewhat disinterested, such as officials of the USDA's Natural Resources Conservation Service, which has historically initiated many cooperative efforts aimed at improving both land health and economic conditions for livestock producers. Many respondents cited county or university Extension personnel as reliable, unbiased partners who can be trusted because they gain no competitive advantage for themselves or their organization. An ecosystem management pilot program involving NIPF owners found that an informal educational program involving a respected landowner with local credibility on land-use issues was effective in promoting voluntary involvement (Campbell and Kittredge, 1996).

Our findings suggest that there is hope for productive collaboration between landowners, government officials, and other interest groups. Many Utah ranchers are tired of conflict, and are more than ready to try alternative approaches to resolving disputes over rangeland. However, we also identified eight conditions or elements that can make collaboration flourish or die. These elements, however, were generated in hypothetical scenarios by rangeland owners, only one of several representatives involved in typical collaborative decision-making processes. Further

research with actively working groups should be conducted to legitimize claims made by these landowners.

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CHAPTER III

PARTICIPANT EVALUATION OF RANGELAND COLLABORATIVE PARTNERSHIPS

Abstract

The management and allocation of natural resources often generate conflicts among different user groups and stakeholders. Collaborative partnerships have been attempting to ease these conflicts by enlisting traditional adversaries to develop workable objectives for land management decisions. Studies have shown that certain procedural elements may make partnerships more successful, but no guidelines yet exist for emerging groups. This research looked at collaborative partnership participants' perceptions of their process. Seven procedural and group compositional elements were obtained from landowner interviews: realistic goals; compromise or consensus-based decision-making; time efficiency; participant commitment, especially public land management agencies representatives; more weight given to local concerns than non-local concerns; participant knowledge of local ecosystems; and respect among participants. One element was derived from the literature: that participants feel somewhat in control or have a voice in their partnership. All but one element, more weight given to local concerns, are correlated with participants' perceptions of fairness and effectiveness.

Introduction

The conventional approaches to natural resources conflict too often have been to avoid issues, find a quick temporary solution, or battle--often by using litigation, lobbying, demonstrations, and letter campaigns (Carpenter and Kennedy 1988). "Such contentious methods of handling disputes...produce winners and losers, may leave fundamental differences unresolved, and potentially please few or none of the parties" (Daniels et al. 1994, p. 327). Partnership approaches to natural resources management are often advocated as means of easing contention between traditional adversaries by engaging in productive discussions about land use and resource protection. Unfortunately, many people are entering into these partnerships with little or no experience in conflict management. Although people may have good intentions, just agreeing on common goals toward which to work may be difficult--especially if people are meeting for the first time. Often, heart-felt values, like those associated with natural resources, are fundamentally at odds with values from the "other side." Participants often find it difficult to break down traditional stereotypes in order to accomplish anything.

Throughout the natural resources arena, existing groups are attempting to work together by utilizing and combining various elements of collaborative processes, e.g., Coordinated Resource Management (CRM) (Phillipi and Cleary 1993), Alternative Dispute Resolution (ADR) (Torrell 1993), Habitat Partnership programs

(Gerrans 1992), and Collaborative Learning (Daniels and Walker 1995). Despite the various names and objectives of these groups and processes, there seem to be similarities, especially in group procedural elements. It would be helpful if emerging partnerships could learn from these existing groups. However, these groups vary in the effectiveness. Why do some seem to develop an achievable plan, while others fall apart before objectives are met?

Fundamental to these partnerships are the individual participants who give their time and energy as they work on the various purposes for their specific partnership. Participants may differ in the estimation of whether their particular process (or part of it) is fair and worth their time and effort. If correlates of participants' satisfaction can be identified, emerging groups can begin working from a set of guidelines, and existing groups may be able to identify reasons for their own struggles. Past research has focused on successful partnerships, defining "success" as longevity of the group (Cormick 1976) or the realization of the goal(s) for which the group was established (Shindler and Neburka 1997). This research differs in that success is defined by the participants. We gathered information from participants working in many types of collaborative groups, identifying indicators of perceived fairness and effectiveness of participants. We attempted to analyze participant perceptions of fairness and effectiveness of eight different groups in four western states. While we relied on case studies of partnerships for process elements, we know of no other study that focuses on individual participant perceptions of their

involvement in a collaborative partnership.

The theoretical basis for this study comes not only from the existing literature on collaborative processes (Moore 1994; Shindler and Neburka 1997; Walker and Daniels 1996), but also from private rangeland owners themselves (see Chapter II). We focused on landowners because (1) ecosystems can rarely be sustained when ecosystem management strategies are only applied to public lands (Grumbine 1994) and (2) non-agency stakeholders are likely to be more hesitant than agencies officials to participate in partnerships. We asked landowners, hypothetically, if they were asked to include their private land in a ecosystemwide management program, what elements would they feel were necessary. Analysis of interview responses led to the identification of seven elements landowners saw as critical for collaborative groups. While the lists reflects the particular concerns of private landowners, other research and case studies indicate the importance of most of these elements as well. They are briefly described here (in no particular order).

Feasibility

Landowners said they felt that, in order to get anything accomplished, the goals and objectives had to be realistic. They did not think a partnership on the landscape scale of the Colorado River watershed, for example, could be accomplished. Shindler and Neburka (1997) also found that feasibility was important to individuals in collaborative groups. These participants felt that the purpose of the

meetings(s) should be defined at the outset.

Compromise and Consensus

Most people involved in collaborative land management committees, including landowners interviewed, think that voting on issues only shows who had the most supportive members at any particular meeting. Collaborative processes should be just that--*collaborative*. They should not merely be forums of opinion, but an interactive way to address different options (Cleary 1988 Dagget 1995; Dufurrena 1994; Krueger 1992; Holbert 1991;). The published CRM process calls for consensus-based decision-making (Phillipi and Cleary 1993).

Time Efficiency

Landowners--especially ranchers--said their time was precious. They did not want to feel they were wasting their time, so they wanted the group to spend time productively.

Small Groups

In order to permit meaningful interaction among partners, landowners felt the groups should be small--when prompted, most landowners said eight to ten participants.

Local Participants

In addition to few participants, landowners wanted to know the people

involved. They wanted participants in a partnership to be predominately local residents and they wanted participants to consider local residents' concerns more important than outside influences. Many feel that land is "better managed when people at the local level--those affected most by the decisions of government--were empowered to come up with their own solutions" (Grant 1994, p. 34).

Participant Commitment, Especially by Public Land Management Officials

Case studies and evaluations of collaborative groups--whether CRM (Swanson 1994), collaborative learning (Daniels and Walker 1995), or other collaborative efforts in the United States (Holbert 1991; Shindler and Neburka 1997) or abroad (Moore 1994)--indicate that participants commitment other process is crucial. Interviewed landowners agreed.

Essential to the success of collaborative partnerships is sharing of decision-making authority among all participants (Holbert 1991; Moote and McClaran 1997; Swanson 1994; Walker and Daniels 1996). Landowners wanted government land management agencies to relinquish at least as much decision-making authority over public land as they asked of landowners. Recommendations developed in partnerships should be taken seriously by relevant agencies (Shindler and Neburka 1997). Participants do not want to develop a plan only to have it ignored by land mangers (Dufurrena 1994; Lyden et al. 1990).

Knowledgeable Participants

It was important to landowners that the people involved in planning and management of their land be knowledgeable about the ecological processes and economic realities of the land. For example, they do not want to be expected to grow plants requiring a lot of water in a desert climate, or to reintroduce species for which habitat no longer exists. A shared understanding of environmental issues was important to partnerships studied by Moore (1994). Accurate information, and sufficient access to it, is also important (Shindler and Neburka 1997).

Mutual Respect

Respect among participants seemed important to landowners interviewed as well as those involved in other established groups. Daniels and Walker (1995) found that a learning approach to value and interest differences was important for group interaction, and Moore (1994) found that "talking and listening" foster respect and acceptance. Participants in the Shindler and Neburka (1997) study said that feeling they are important was an element of success.

Voice and Control

Along with the seven elements identified by interviewed rangeland owners, literature on collaboration and fairness revealed an additional element–voice and control--that we included in our study. Although not suggested directly by landowners, feeling they had a valid voice and input into the decision-making process

was implied by statements advocating the need for an alternative process to the public input procedures of the National Environmental Policy Act (NEPA). The literature also emphasizes involvement as essential to perceived procedural fairness (Lind et al. 1990; Thibaut and Walker 1975; Tyler 1987; Tyler and McGraw 1986). Tyler (1987) suggested that involvement may mean the ability to express an opinion or a "voice" in the process. Additionally, Musante et al. (1983) posited that involvement may mean the perceived control one feels over how the process operates. Control may "enhance the evaluation of adjudication" (p. 236).

Timing of this input is also important to voice and control. Participants must believe their input is received by decision makers *before* the decision is made (Lind et al. 1990; Tyler and McGraw 1986)--a critical issue in the evaluation of current public input procedures of government land management agencies. Although NEPA requires agencies to gather public input concerning decisions, it is standard procedure for agencies to develop a "preferred alternative" *prior* to the public comment period. Additionally, agencies are not required to incorporate participants' opinions or concerns in the final decision (Fogelman 1990), leaving many to feel they have no control in the forming of the decisions. Consequently, affected interests and other citizens often believe their opinion will not affect the predetermined decision (Lyden 1990), and therefore many judge NEPA-style public involvement as being unfair. Participation in collaborative partnerships may be a more fair and responsive alternative to NEPA-style public involvement (Walker and Daniels 1996)--but it is

important to know whether such partnerships avoid the pitfalls of the NEPA process.

Other Elements

Landowners identified small groups (8-10 people) as an important group compositional element. Additionally, the literature reveals that the involvement of a professional mediator or negotiator in collaborative processes may play a critical role in the group process (Cormick and Huser 1979; Crowfoot and Wondolleck 1990; Susskind 1985). However, all but one group we surveyed had 15 or more participants and we were only able to find one group who employed a mediator. Therefore, there was not enough variation in these factors to make any comparative analyses between groups. We did not test for these elements.

Hypotheses

Based on the qualitative information gathered (see Chapter II) and on the literature, the following hypotheses were identified:

H_1: Participants' assessments of fairness of the collaborative process will be positively associated with their judgments about whether each of the following process elements is present:

a) realistic goals;

b) compromise or consensus-based decision-making;

c) time productively spent;

d) committed participants–especially public land management agency decision makers committed to abide by decisions made;

e) more weight given to local concerns than non-local concerns;

f) participants know about local ecosystem dynamics;

g) mutual respect or participants within the group;

h) having a voice or feeling in control.

H_2: Participants' assessments of the effectiveness of the collaborative process outcome (or anticipated outcome) will be positively associated with their judgments about whether each of the above stated elements is present.

Methods

Survey Sample

Eight partnerships were selected for testing from Idaho, Nevada, Utah, and Wyoming. Because a list of all collaborative rangeland partnerships was not available, the groups were selected for their willingness to participate and by our knowledge of them--random selection from a population of partnerships was not attempted. Groups were selected that varied in location, procedures, and objectives, but all possessed certain qualities. Many landowners and agencies were active in developing a plan of action that focused on a specific geographic area with both federal and private land.

A few partnerships employed a professional mediator for the first few

meetings, but only one partnership used a mediator regularly. Some relied on agency- or state-trained government participants for facilitation. The area of land the groups manage ranged from 31,000 acres to 600,00 acres, and all but one group was dealing with land mostly in rural areas. All but two groups had 15-20 participants, one had 5, the other had over 40. Detailed descriptions of the characteristics of and circumstances leading to the formation of the study groups are found in Appendix B. The study groups are Lucin-Pilot-Libby Allotment (LPLA) CRM in western Utah and eastern Nevada; Clover Creek CRM in western Utah; The Lost Creek Chapter of the Utah Foundation for Healthy Land in northern Utah; Boise Front Coalition in Idaho; Shoshone Basin CRM near Burley, Idaho; Toiyabe Wetlands and Watershed Management Team (TWWMT) in central Nevada; Muddy Ridge CRM in central Wyoming; and Red Canyon Ranch CRM near Lander, Wyoming.

Survey Instrument/Distribution

Respondents were asked to complete a four-page survey. We attempted a census distribution, distributing the survey to each member of the eight groups. All but three group coordinators provided enough information to mail surveys directly to participants in February 1996, and a follow-up postcard was mailed a week later. Group coordinators of the Shoshone Basin Planning Committee, Red Canyon Ranch CRM, and Muddy Ridge CRM did not want to reveal the names or addresses of their participants. However, they agreed to distribute the surveys at their February meeting.

Of the 148 surveys distributed in the mail and to group coordinators, 100 surveys were completed and returned, a 68% response rate (Table 1). This number assumes that the distributing coordinators handed out all the surveys they were given. However, because two of the three distributing coordinators did not record how many surveys they actually distributed, it is likely that the actual response rate is somewhat higher. Response rates were lowest for the three groups where surveys were distributed by members rather than direct mail.

Analytical Methods

Data analysis was conducted by obtaining descriptive statistics (percentages and correlations) for all dependent and independent variables in the survey. Inferential statistics were not used because they assume random sampling from a population (Johnson 1992). The results of this study are based on a 100% sample of partnership participants with a 68% response rate. It is reasonable that those that responded did so because they felt strongly--one way or the other--about their partnership. Additionally, because of limited control over the distribution of three groups' surveys, we may have missed individuals who would have responded differently than the respondents. Therefore, a random sample within and among partnerships cannot be assumed, making it inappropriate to infer these results to nonrespondents. However, these results provide information regarding individual participants' perceptions of various partnerships in the Intermountain West.

Table 1. Response rates of groups for survey distribution.

Group	#Returned/ #distributed	Percent	Group	#Returned/ #distributed	Percent
LPLA	11/15	73%	Shoshone Basin[a]	10/17	59%
Clover Creek	16/18	89%	Toiyabe WWMT	22/23	96%
Lost Creek	4/5	80%	Muddy Ridge[ab]	8/22	36%
Boise Front	21/26	80%	Red Canyon[ab]	8/20	40%

[a]Participant distribution
[b]Unknown distribution

Dependent Variables: Perceived Fairness and Effectiveness

Fairness. Respondents were asked to rate their perception of the collaborative process with which they are involved. Two seven-point outcome-oriented fairness Likert items were posed. The first question, based upon similar studies by Leventhal (1980), Lind et al. (1983), and Barrett-Howard and Tyler (1986), asked respondents to rate their level of agreement that "This partnership process will lead to fairer decisions than without the process." Second, to determine whether individual participants felt they were involved in overall management decisions, respondents were asked their level of agreement to "This process is not a good way to get my views incorporated into management." A complete version of the survey is included in Appendix C.

Effectiveness. To measure effectiveness, three levels were defined.

Respondents were asked if (1) they personally and (2) the land overseen by the group are better or worse off as a result of the collaborative process. Both variables were 5-point categorical items with a neutral choice. The third variable was a 7-point Likert item measuring agreement with the statement, "The group's objectives are being met by this partnership."

Independent Variables: Procedural Elements

Eight process elements were tested for association with perceived fairness and effectiveness of collaborative processes. All were measured through responses to categorical and Likert-type survey items measuring levels of agreement with statements about the process. One to three items per process element were necessary to sufficiently tap the concept of each element (Table 2). Association between the dependent and independent variables was measured through Pearson product-moment correlations (r). Significant correlations were interpreted as evidence that respondents are more likely to perceive the process as fair or effective if they perceived that the particular element was present in their group. Although the non-random sampling design precluded the use of p-values to assess the statistical significance, it is useful to employ some measure of practical significance in order to assess if meaningful relationships between variables are likely to exist. Therefore, significance levels (alpha=.05 and .001) are reported here in order to give the reader an idea of the approximate meaning of the r values shown.

Table 2. Survey items used to measure process elements.

Element	Items	Question type
Feasibility	The goals for this partnership are realistic	7-point Likert scale
	How well were the objectives for forming this partnership defined from the beginning?	4-point categorical
	The size of land area covered by this partnership is (just the right size).	5-point categorical
Compromise and Consensus	We don't vote, but rely on compromise and agreement.	7-point Likert scale
	There is a lot of give and take among all the participants.	7-point Likert scale
Time Efficiency	When we meet, we get right to work on important issues.	7-point Likert scale
	Sometimes we spin our wheels and don't accomplish much.	7-point Likert scale
	This partnership is worth my time.	7-point Likert scale
Committed Participants	Participants are not willing to provide the necessary information to the group.	7-point Likert scale
	The members of the group are committed to our decisions.	7-point Likert scale
	I believe the government agencies involved are willing to share decision making responsibility.	7-point Likert scale
	I believe the relevant government agencies will use the information generated in this partnership.	7-point Likert scale
Local Influence	Compared to other interests, local needs and concerns are considered (as important) to this partnership.	5-point categorical
	How many people in your partnership are from the local affected area?	6-point categorical
Knowledgeable Participants	How often do you feel that you are knowledgeable about the issues discussed among the group?	5-point categorical
	How often do you feel that other group members are knowledgeable about the issues discussed among the group?	5-point categorical
Mutual Respect	I do not feel respected by the other participants.	7-point Likert scale
	I respect most of the participants.	7-point Likert scale
Voice and Control	Some people are more influential than others.	7-point Likert scale
	How much influence do you feel you have in the group?	6-point categorical
	I feel like I have some control over what happens during meetings.	7-point Likert scale
	How often are you interrupted when you speak?	5-point categorical
	Are you able to voice your opinion when you want to?	5-point categorical

Results

Respondent Characteristics

Of the 100 partnership members who returned the survey, 18% were ranchers, and 27% were employees of federal land management agencies. The remaining 55% of the participants identified themselves as stakeholders who are not directly responsible for managing lands within the partnership, but are important off-site constituents or who have range-related expertise that may be important to the process, including NRCS employees, university county agents, environmentalists, and concerned citizens (Table 3). Half of the participants reported living within 20 miles of the partnership's "landscape focus." Twenty-four percent owned land within the partnership, 17% leased. There was a fairly even distribution of new and long-time residents; 45% have moved to the area within the past 10 years, and 55% have lived in the area for over 10 years. The majority of the respondents, 77%, were the first generation to live in the area.

Perceptions of Fairness

Perceived fairness was measured through responses to two Likert-type items (Table 4). Eighty-three percent of the respondents agreed that "this process will lead to fairer decisions than without the process," with half strongly agreeing with that statement. Almost three-quarters of the respondents agreed with the statement that "this process is a good way to get my views incorporated into management," with

Table 3. Respondent characteristics.

Role the brought individuals to partnership		Proximity to geographic area		Age of participants	
Rancher	18%	0-20 miles	52%	under 40	16%
BLM or USFS	28%	21-50 miles	17%	40-59	71%
Other	54%	over 50 miles	32%	60 and over	13%
Household dependence on role indicated		**Years lived in area**		**Sex of participants**	
75-100%	49%	1-10 years	45%	male	85%
50-74%	15%	11-20 years	26%	female	15%
25-49%	10%	20+years	27%		

Table 4. Percent agreement with statements measuring procedural fairness.

This process will lead to fairer decisions than without the process.			
Strongly Agree	48%	Slightly Disagree	2%
Agree	26%	Disagree	1%
Slightly Agree	8%	Strongly Disagree	2%
Neutral	12%		
This process is a good way to incorporate my views into management decisions.			
Strongly Agree	36%	Slightly Disagree	9%
Agree	30%	Disagree	7%
Slightly Agree	6%	Strongly Disagree	1%
Neutral	10%		

about a third strongly agreeing.

Correlations between perceived fairness and specific process elements are shown in Table 5. Hypothesis 1 predicted that correlations would be found between perceived fairness and each of the eight process elements. H_1 is fully supported by three out of the eight elements (feasibility, time efficiency, and compromise and consensus) that correlate with both fairness questions. Partial support of H_1 was found for another five elements (participant commitment, including government agencies; knowledgeable participants; mutual respect; voice and control), with items correlating with either incorporating personal views into management decisions or increasing the fairness of decisions made. Only one element, local influence, did not correlate at all with either fairness indicators.

Perceptions of Effectiveness

Similarly positive results were found regarding effectiveness. Perceived effectiveness was measured through responses to three Likert items (Table 6). One quarter of the respondents indicated that they were much better off, with 71% saying they personally are at least somewhat better off. About a third of the respondents indicated that the land is much better off, with only 2% saying the land was in worse condition than when the group began meeting. Over three quarters of respondents at least slightly agreed that their groups' collective objectives were being met.

Correlations between the perceived effectiveness and specific process elements

Table 5. Correlations of perceived fairness and effectiveness with process elements.

		– Fairness items –		– Effectiveness items –		
Element	Items[a]	Views not incorporated r	Fairer decisions r	I am better off r	Land better off r	Group's goals met r
Feasibility	Realistic goals	-.54**	.58**	.54**	.57**	.70**
	Defined objectives	-.30**	.42**	.38**	.40**	.39**
Compromise and Consensus	Rely on compromise	-.24*	.30*	.17	.18	.04
	Give and take	-.36**	.20*	.42**	.46**	.40**
Time Efficiency	Right to work	-.30*	.33**	.28*	.32**	.51**
	Spin our wheels	.23*	-.28*	-.34**	-.35**	-.40**
	Worth my time	-.44**	.62**	.62**	.62**	.63**
Committed Participants	Not providing information	.28*	.13	-.36**	-.23*	-.34**
	Committed to decisions	-.24*	.35**	.34**	.16	.55**
	D-m responsibility	-.11	.17	.24*	.32*	.42**
	Use information	-.25*	.24*	.36**	.39**	.47**
Local Influence	Local needs more	.09	.06	.10	-.01	-.02
	From local area	.19	.03	.00	-.06	-.04

Table 5. Continued.

Element	Items[a]	– Fairness items –		– Effectiveness items –		
		Views not incorporated r	Fairer decisions r	I am better off r	Land better off r	Group's goals met r
Knowledgeable Participants	I don't understand	.26*	-.05	-.13	-.15	-.19
	Others don't understand	.12	.16	-.26*	-.22*	-.27*
Mutual Respect	I do not feel respected	-.28*	.19	-.37**	-.14	-.39**
	I respect others	-.19	.27*	.18	.23*	.19
Voice and Control	Some have influence	.00	-.20	-.14	.35**	-.14
	I have influence	-.21*	.17	.18	-.14	.20
	I have control	-.32*	.40**	.42**	.23*	.29*
	I am never interrupted	-.12	.08	.28*	.12	.16
	Able to voice opinion	-.29**	.54**	.58**	.46**	.54**

[a]Full descriptions of process elements are shown in Table 2.
* $p \leq .05$
** $p \leq .001$

Table 6. Responses to statements regarding effectiveness.

Because of this process, I am _____.			
Much better off	25%	Somewhat worse off	5%
Somewhat better off	45%	Much worse off	0%
No better, no worse off	24%		
Because of this process, the land is _____			
Much better off	38%	Somewhat worse off	1%
Somewhat better off	40%	Much worse off	1%
No better, no worse off	19%		
The group's objectives are being met by this partnership.			
Strongly Agree	25%	Slightly Disagree	2%
Agree	47%	Disagree	5%
Slightly Agree	11%	Strongly Disagree	3%
Neutral	6%		

are shown in Table 5. Hypothesis 2 predicted that correlations would be found between perceived effectiveness and each of the eight process elements. H_2 is fully supported by three out of the eight elements (feasibility, time efficiency, and the commitment of government agencies) with all items correlating with all three effectiveness indicators. Partial support of H_2 was found for five elements (compromise and consensus; participant commitment; knowledgeable participants; mutual respect; and voice and control), with items that correlate with either feeling personally better off, feeling the land is better off, or feeling the group is realizing its

objectives. As with fairness, the only element that does not support H_2 is local influence.

Discussion

Procedural Elements

Feasibility

The perceived fairness and effectiveness of a partnership is closely related to participants' impression of its feasibility. Objectives should be easier to accomplish if they are realistic and clearly stated. As anticipated, participants who indicated these items were present in their partnership were more likely to rate their process effective, as well as fair. Having an appropriate, manageable amount of area is also important for feasibility.

Compromise and Consensus

Respondents were less straightforward in answering questions that we felt captured the consensus concept. People who said there was a lot of give and take among all participants were more likely to say the process was both fair and effective. However, "not voting, relying on compromise and agreement" is only associated with fairness, not effectiveness. This may suggest that consensual decision-making is seen as less important for effectiveness, perhaps because of the additional time involved. It may also mean that participants agree to disagree in order to realize the group's goals.

Time Efficiency

Because working with so many people with different interests is complicated, collaborative processes are often seen as a waste of time (McCloskey 1996). However, the results of this study reveal that even though sometimes a meeting may seem to be going nowhere, participants still feel participating was worth their time. Spending time wisely seemed to be important for the perceived fairness and effectiveness of a partnership. Not surprisingly, "spinning wheels" or sometimes not accomplishing all that is intended was negatively correlated with effectiveness.

Participant Commitment, Especially by Public Land Management Officials

Results suggest that for fair and effective processes, all necessary information should be provided voluntarily, and participants should be dedicated to decisions made by the partnership. Respondents who indicate that other participants were willing to provide information and were committed to the decisions and outcomes are more likely to say that their process is effective for themselves and the group, and that participating in their partnership is a good way to get their views into management. There was no relationship between perception that collaboration is fairer than other processes and a belief that some participants were not willing to share information.

We found different results when we isolated the perceived effectiveness of participating government agencies. Consistent with the findings of Shindler and

Neburka (1997), respondents who believed that the government agencies were planning to *use the information* generated from the group were more likely to indicate that the process was both fair and effective.

The crucial component of collaboration, discussed by Moote and McClaran (1997) and Walker and Daniels (1996), that government agencies share decision-making authority, correlates with all three effectiveness items. This finding supports these authors and others (Brunson in press; Burnside and Rasmussen 1997) who suggest that public-private partnerships highly rely on the government agencies' commitment to collaborate. Surprisingly, the willingness of government agencies to share decision-making responsibility did not correlate with the two fairness items. Perhaps citizens involved in partnerships do not feel they have a right to share the ultimate *responsibility* of public land management; they may only want to see that government agencies are responsive to them as members of the public.

Mutual Respect

There is some evidence that feeling respected is associated with fairness and effectiveness, and that respecting others may help sustain a fair process. However, respecting others did not correlate with any of the effectiveness items, suggesting that participants do not find it necessary to respect others in order to get things done.

Voice and Control

Two primary reasons that collaborative efforts have begun is to give

stakeholders the ability to voice their opinion and to change someone's mind or affect policy. Respondents who indicate that their partnership is fair and effective feel their participation and opinions matter, but not necessarily that they are in sole control. Respondents who said they had *some* control in their meetings and that they were able to voice their opinion when they wanted to were more likely to indicate their partnership was a fair and effective, and having influence correlates with getting views expressed in management decisions. Surprisingly, being interrupted is not negatively correlated with the fairness or effectiveness items. Perhaps participants realize that being interrupted sometimes occurs in a group discussing complex issues and is a natural function of group interaction.

One item in this category of independent variables was correlated with neither the fairness nor effectiveness items: "Some people are more influential than others." Respondents indicated that certain people in the partnership *are* more influential than others, yet did not necessarily consider this a detriment to the process. A negative correlation was predicted because a central idea of collaboration is that no person or agency has more influence than any other (Walker and Daniels 1996). Disproportional influence may be accepted because it is perceived as how many groups in society function together. There are likely many reasons why a participant has more or less influence, but an equitable or proportional distribution of influence may be seen as positive, an idea which appears in the social psychology literature as "equity theory" (Mikula 1980; Sampson 1975). In support of the equity theory,

landowners in the initial study suggested that larger landowners should have more control over the direction of the partnership than smaller landowners.

Knowledgeable Participants

There is only a relatively weak association between perceptions of fairness and effectiveness and respondents' assessments of participants' knowledge. Respondents were more likely to believe their views were incorporated into decisions if they generally felt knowledgeable about issues being discussed. However, there was no link between fairness and the perceived knowledgeability of others. Conversely, there was no correlation between respondents' self-evaluations of knowledge and their perceptions of process effectiveness. However, they were more likely to judge the process as effective for improving their own situation, the group's goals, and the land if *others* were knowledgeable about the issues. These results suggest that participants in collaborative processes perceive that people who can contribute knowledge to the process are more likely to be listened to and get their views incorporated into management, but ultimately an effective process requires that all or most of the participants have important knowledge to contribute.

Local Influence

Almost every landowner in the initial study (see Chapter II) revealed that they would only be comfortable participating in a partnership with people *from their local area.* If this exclusive participation was not possible, landowners wanted insurance

that local issues and needs would be considered more important than those from the "outside." Yet, actual participants in surveyed partnerships seem to accept and participate with non-local stakeholders fairly and effectively, and do not indicate that any more importance is given to local concerns than any other. This apparent contradiction is the most unexpected finding in this study.

There are at least three possible explanations for this apparent inconsistency. First, two-thirds of the respondents from the surveyed collaborative partnerships lived within 50 miles of the area overseen by the partnership (Table 3). Perhaps because of this dominance of "local" participants, local issues were given more time and attention by default. Second, it may be that non-local stakeholders can participate effectively in natural resource partnerships if they bring locally relevant expertise. For example, an NRCS employee from Salt Lake City may be an acknowledged expert on local soils. Finally, the concept of "localness" that landowners expressed could be more about *familiarity* than where someone lives. Because collaboration requires participants to trust each other (Dagget 1995; Walker and Daniels 1996), it is more realistic to expect a fair and productive partnership with individuals one knows, i.e., neighbors. However, as a partnership progresses in time, participants become more familiar with each other, fostering relationships of trust. Hence, actual experience in a partnership may moderate participants' original perceptions of other participants.

Conclusions and Implications

Because each situation and group is different, it is unclear if there is any "mix" of elements that will *ensure* a successful process. In all but one case, however, there was some evidence that the presence of the tested collaborative process elements is associated with participants' perceptions of a fair and effective processes. Although there are no simple guidelines (Carpenter and Kennedy 1988), group organizers need not begin a process from scratch. The process elements discussed in this study and others (Krueger 1992; Shindler and Neburka 1997) can give organizers and participants some direction--or at least a place to start when initiating a partnership and working through difficult issues and conflicts. Alternatively, we found no evidence that a *particular* process was more highly associated with fairness or effectiveness. As long as these elements are present--and they are included in most descriptions of collaborative processes--the particular model of operation can be chosen to fit the specific needs or characteristics of the group members, issues, or goals without fear of choosing a less fair or effective model.

In the initial study of this thesis, interviewed landowners strongly felt that a partnership would only succeed if the influence of local people was emphasized over "outside" opinions. However, this was the only element that did not seem to be important to participants' perceptions of fair and effective processes. Participants did believe involving people knowledgeable about the area managed is important, perhaps

more so than solely including people who live in a certain geographic region. When landowners expressed local participation as important, they could have been talking about involving knowledgeable people who are committed to land and local economic development and are worthy of their trust and respect. The concept of "localness" may be more related to familiarity with each other than where a participant happens to live. Since collaboration requires a great deal of trust, participating with neighbors and friends would probably be seen as more positive and effective. However, as participants become more experienced and familiar with others, where a participant lives becomes less important.

The importance of government agencies share decision-making authority, discussed by Burnside and Rasmussen (1997), Moote and McClaran (1997), and Walker and Daniels (1996), is supported by this research. Public-private partnerships rely heavily on the government agencies' commitment to collaboration by giving up some discretion over land management decisions (Moote and McClaran 1997, p. 476). Empirical evidence about surveyed partnerships suggests that government commitment may determine the success of a partnership. Since the time the survey was distributed, two partnerships have disbanded. (1) The Boise Front Coalition has ceased meeting mainly because government agencies stopped participating as they had previously and (2) the ranch owners and spearheads of the collaborative efforts of the TWWMT have moved to another area where agency land managers seemed more cooperative. At the time this thesis was written, one of our study groups was stalled

because a BLM participant was refusing to follow through with his volunteered duty, which is writing the plan developed by the partnership for government implementation. Most other groups are still actively collaborating mainly because of support from government agencies and programs.

When participant responses from each partnership were analyzed separately, few differences were detected. This may be because most of the partnerships were in the planning rather than the implementation or monitoring stage of their processes.

However, the willingness of government agencies to share decision-making responsibility *did not* relate to participants' perceptions of fairness. This suggests that public land management agencies do not have to relinquish *all* decision-making authority for public land to a collaborative partnership. Land management agencies need not shy away from collaborative partnerships because of the possible legal constraints of shared authority. Yet, there is evidence from this research that public land administrators need to show that the participants' input has been heard, used, and responded to in land management decisions.

One of the oldest groups, the Boise Front Coalition, had slightly less positive results than other partnerships and was starting to dissolve during the time of survey distribution, reportedly due to government agency inaction. It is possible that these results reflect the different stages of the processes that we surveyed. Perhaps newer groups' participants feel positive because government agencies are participating fully. After plans are developed, however, participants' perceptions may be different if the

implementation of these plans is slow or if circumstances change so that plans or goals are no longer relevant.

The overwhelmingly positive responses of participants in natural resource collaborative working groups confirm previous conclusions (Dagget 1995; Moore 1994; Shindler and Neburka 1997) that public/private land management partnerships can work--and are working throughout the Intermountain West. Traditional adversaries such as Indian tribes, Anglo ranchers, federal agency employees, and environmentalists are engaging in productive dialogue. The majority even feel they are making substantial improvements to the land they are trying to manage together. Participants themselves are saying that they feel better about participating in collaborative efforts over the customary public input process. Given the contentious nature of current land management, confidence should be placed in various forms of collaborative partnership.

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CHAPTER IV

CONCLUSION

Although the practice of collaboration among stakeholders in the natural resource arena is not new, it is becoming increasingly popular, "popping up as often as wood ticks across the Western landscape" (Jones 1996, p. 1). There is no count of how many collaborative groups--ranging from grassroots organizations to government-mandated advisory councils--now exist, but McClellan (1996) and Jones (1996) report many hundreds, including 70 coalitions organized around watersheds. Bob Budd, caretaker of The Nature Conservancy's Red Canyon Ranch, stated that in 1998, the Wyoming Governor's Conference on Coordinated Resource Management (CRM) programs reported over 100 formal and informal partnerships at some stage of development. Many say that engaging traditional adversaries in productive dialogue over land management issues can alleviate some problems associated with traditional public input in natural resources management and the ever-perplexing problem of cross-boundary ecosystem management. Actually putting the theories and ideas of conflict management into practice has not, and probably never will be an easy way to make decisions regarding natural resources and their allocation. However, this thesis has provided insight concerning the overall satisfaction of participants in collaborative processes.

Not everyone is supportive of or captivated by the promises of collaborative

and consensus efforts. Many landowners and other rural stakeholders worry about losing private property rights to additional regulations (Lewis 1995), while several environmental organizations feel that participation will take time away from "regular environmental activism," such as lengthy court battles (McCloskey 1996; SUWA 1994). Despite these barriers to constructive collaboration, we found participants in existing collaborative partnerships to be generally happy with their experience. The majority feel they are treated fairly, the group is operating efficiently, and they are making improvements to the land. Most also believed that collaboration was a better, and more fair way to make decisions than previous methods of public input. The findings of associations between process elements and perceived fairness and effectiveness in this thesis offer empirical evidence to support the contentions of people advocating collaborative approaches. The information from this thesis can be combined with additional research and experience to begin establishing guidelines for emerging and struggling partnerships.

This study also highlights at least three issues that warrant further study if we are to adequately understand collaborative partnerships and their implications for multi-owner partnerships. First, the concept of local participation should be explored further. Many landowners said in interviews that they would only feel comfortable in a partnership comprised solely of local participants. However, the survey offered no support for an assertion that local residency of group members is relevant to participants' perceptions of existing partnerships. The concept of "localness" may be

more related to familiarity with participants than where a participant happens to live. Because collaboration requires participants to trust each other (Dagget 1995; Walker and Daniels 1996), it is more realistic to expect a fair and productive partnership with friends and neighbors. However, actual experience in a partnership may moderate participants' original perceptions of one another because they are becoming more familiar. Research on individuals' perceptions of other participants before a partnership commences and as the partnership progresses should provide information regarding how individuals feel about the people with *whom* they are collaborating.

Conversely, those implementing collaborative partnerships should be aware that an exclusively local group can potentially alienate environmental organizations, which may feel they are "least organized and potent" in small communities (McCloskey 1996). The apprehensiveness of the environmental community highlights the second research need. Although the partnerships surveyed were grappling with difficult issues and breaking down long-time stereotypes, they were composed primarily of ranchers and public land managers. The lack of representatives from the environmental community may be one weakness of this study. The same survey, sent to groups involving different individuals, could yield alternative responses to participants' perceptions of fairness and effectiveness. Additional research on individual participants in other partnerships is needed to further the conclusions in this thesis.

Means of persuading landowners and others from the private sector to

participate in collaborative partnerships should also be explored further. Attention should be placed on how potential participants are approached, and by whom they are approached. Since market forces will not, by themselves, encourage private sector participation in ecosystem management (Daniels 1993), other means should be investigated, such as tax incentives, free technical advice, and subsidies (Brunson et al. 1996). Our research reinforces previous findings that people are more likely to participate if they are approached by someone they trust (e.g., Campbell and Kittredge 1996; Rogers and Shoemaker 1971). Landowners suggested county Extension agents or trusted long-term residents. It would also be helpful to identify trusted individuals or organizations in the environmental community.

For better or worse, ecosystem management partnerships and other processes are often initiated by federal land management agencies. This may be counterproductive considering the lack of trust among stakeholders toward federal officials. One county Extension agent who is involved in a group we surveyed said that partnerships such as this "have to be initiated by local land users, or they are destined to fail. No one trusts the Feds. They think the Feds have ulterior motives." Other participants may be less leery of federal initiation; Shindler et al. (1996) concluded that the general public trust the expertise of public land management agencies (in that case, the Forest Service). In the long run, committed participation of land managers in collaborative partnerships may help improve their relationship with the public.

The necessary involvement of public land management agencies presents obstacles in many collaborative efforts, primarily because (1) traditional stakeholders often do not trust them, and (2) they are constrained by many laws that may hinder the involvement required for effective collaborative land management. Federal land managers have been accused by people from the wise-use/property rights and environmental movements of being "captured" by the other side (e.g., Lewis 1995; Marston 1994). Many natural resources managers may not understand their constituencies' values (Xu and Bengston 1997), partially because of agency managers' lack of communication skills (Banner et al. 1993; Butler 1995). Asking federal land managers to move from their traditional roles of collecting scientific data and "using that data to assume a role in establishing community values" (Burnside and Rasmussen 1997, p. 22) to a more interactive and collaborative role, more responsive to the public, has proven challenging.

The participation of federal land management agencies presents further challenges because of their constraints as government entities. An important component of collaboration is that participants share decision-making authority over all resources involved in the partnership (Walker and Daniels 1996). This means that land management "agencies give up some discretion" (Moote and McClaran 1997, p. 476) over resources they have traditionally managed. Unfortunately, the interpretation of some laws and regulations has limited the government agency participation on some multiple party committees. The perceived impediments of the

Federal Advisory Committee Act (FACA 1972), for example, have limited the participation of many agencies, contributing to the disbandment of one group we surveyed. Addressing FACA and other laws will be critical if politicians want partnerships to continue and succeed. However, the findings of this thesis have suggested that public land management agencies do not have to relinquish *all* decision-making authority for public land to a collaborative partnership; administrators simply need to show that the participants' input has been genuinely heard, used, and responded to in land management decisions.

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APPENDICES

APPENDIX A:

INTERVIEW GUIDE

Landownership information

- How many acres of private land do you own?
- Do you lease public land? State or federal? How much? When?

What you know about ecosystem management

- Have you ever heard the term ecosystem management?
- What do you think it is?
- Where did you get this information? or from whom?

What you think about specific aspects of ecosystem management

- Here are some ideas that are part of the definition of EM. Tell me what you think of them.
- With ecosystem management, there tends to be a strong emphasis on **long-term management** and planning. How do you feel about that? Does any part of this concern you?
- One important aspect of EM is incorporating more **public opinion** into agency decisions concerning land management. How do you feel about that? Does any part of this concern you?
- Agency officials have said that EM will not be forced onto private land and its owners. However, **ecological boundaries** are often not the same as property lines. the idea of EM deals with working cooperatively with many land owners, (including public land agencies) to form management plans that can be achieved through cooperation. How do you feel about

that? Does any part of this concern you?

- Since ecosystems cross property boundaries and considering the many different opinions in "the public", several areas have organized land use **planning committees** comprised of land owners, agency officials, and general public. One of their goals is to develop plans that everyone may be able to live with. How do you feel about that? Does any part of this concern you?
- Is EM something that you feel is already occurring on/around your land/area/county? Do you think that it is a different way to define what is currently being done in your area? in the country? If yes, tell me about it. If no, why don't you think so.
- Do you think EM principles will change and/or affect the management of this area? How?

What more do you want to know about ecosystem management

- How should agencies start EM in this area? What kinds of things would you like to see done? How should they approach private land holders? How would you like to be approached?
- How do you think the government should deal with all the different people with the many different opinions concerning environmental issues?
- Under what conditions would you consider adopting an ecosystem management approach on your private lands? How would you like the

government agencies to come up with these provisions (e.g. public input meetings, advisory groups)?

- Is there anything you would want to know more about before you would adopt ecosystem management principles? If yes, what would you like to know more about? If no, why not?
- How would you like to receive this information? (e.g. county agents)

Planning/Steering Committees or Collaborative Partnerships

- How would you like the government agencies to come up with these provisions (e.g. public input meetings, advisory groups) What if a citizen land planning group came up with an approach?
- How important do you think public input is regarding management of public and private lands?
- What if a citizen land planning group (that included ranchers and other concerned publics) came up with an approach. Would you be more inclined to consider it, or not...why?
- Do you think if the process of gathering input was changed, agencies would listen and make their policies responsive to the input gathered?
- Currently, what do you think is the best way to get you opinion to decision makers? Are you satisfied with this approach? If you could, how would you contact decision makers?

- Have you ever been involved in a citizen planning/public input organization group? Do you know of one in your area? Do you know anyone who is participating?
- How do you feel about allowing other stakeholders the same opportunity to have their voice heard?
- Do you think there is any room for compromise with different stakeholders on the conflicting grazing issues? What are some of your ideas?
- Are there any conditions that you would consider including your land in a ecosystemwide management program with collaborative planning?
- What do you think the main issues would be for discussion at such a group in your area? What are the main issues throughout the state? Throughout the West?

APPENDIX B:

INFORMATION ON SURVEYED PARTNERSHIPS

The Lucin-Pilot-Libby Allotment CRM in Western Utah and Eastern Nevada[1]

The Lucin-Pilot-Libby Allotment (LPLA) CRM was begun in 1994 by a Utah BLM range conservationist. Since a management plan had never been written for the 250,000 acre allotment, this BLM individual felt a CRM would be the best way to develop a plan. The BLM invited permittees, representatives from the NRCS in Utah and Nevada, Nevada's BLM, and Nevada and Utah's Departments of Wildlife. At the first meeting, they discussed who else should be involved--including the Utah State School Trust Land Association. Some people came for only one or two meetings, but there has been a core of 15 people working throughout the process. The group met three to four times a year. The BLM arranged for an impartial facilitator who helped the group develop their own ground-rules, one of which was consensus decision-making. They did not follow the CRM handbook formally. Their goal was to develop a grazing management plan that would improve range health and sustain the resource base of the unfenced public land the BLM manages. One of the four permittees owns a small amount of land in the allotment.

Two years prior to this writing, in 1995, the group assigned a BLM representative to write up the plan--nothing has happened since. At a meeting with BLM and NRCS representatives of the CRM the BLM representative revealed that he did not plan on following through with his assignment because he did not like the

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[1]The information for the LPLA CRM was provided in a telephone interview with Willie Conrad, NRCS Range Conservationist in Elko, Nevada.

management plan developed by the group. At the time of this writing, the permittees, all who liked the process and potential results, were planning to draft their own proposal and submit it to the BLM--forcing them to review it. The group hasn't met since the initial assignment was made to this BLM employee two years ago.

The Clover Creek CRM in Rush Valley, Utah[2]

Rush Valley, in Tooele County, western Utah, is a small agricultural community near the Great Salt Lake whose drinking water is threatened with salt contamination. Recognizing the main reason for this problem as the increasing juniper-pinon population in the mountains surrounding the valley, the local conservancy district (the Shambib) initiated the Clover Creek Coordinated Resource Management team in 1989. These local landowners felt that if they had more partners, they would receive more funding for projects. They also felt that because of the patchwork ownership (45% private, 38% BLM, 13% Forest Service, 4% state) of the watershed, involvement of all landowners and managers would be necessary to accomplish anything. Stakeholders were determined and invited to participate, although the group's meetings have been open to all interested. The partners, including local, county, state and federal agencies, signed a Memorandum

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[2]The information for the Clover Creek CRM was provided in a telephone interview with Norm Evansted, the NRCS employee assigned to the CRM and from their plan written in April, 1997.

of Understanding in 1996. The group, and individuals in the group, have burned, chained, and reseeded areas to improve water storage. Recently, they almost disbanded because the Utah Division of Wildlife Resources (DWR), a partner, wanted to increase the elk herd on the now-improved land, but their differences were resolved.

In the beginning, they met once a month, but they don't feel they need to meet as often now. There is no facilitator, but the Natural Resources Conservation Service (NRCS) has taken on the role as agency in charge, distributing a quarterly newsletter to the 17 members. They follow the CRM handbook for most of their procedures.

The Lost Creek Chapter of the Utah Foundation for Healthy Land in Northeastern Utah[3]

The Lost Creek Chapter of the Utah Foundation for Healthy Land (Lost Creek) was started in 1991 by two DWR employees. Because of increasing development and rising land values in the area, they believed that it was in the best interest of wildlife to help landowners stay in the livestock business, a business with very low economic returns. They thought that income from wildlife, primarily elk, would help augment, if not stabilize, livestock earnings. One third of the land is owned by a corporate ranch, the Deseret Land and Livestock, and about 5% is

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[3]The information for the Lost Creek partnership was provided in a telephone interview with Steve Kearl, the DWR wildlife agent assigned to the area.

BLM. The rest is owned by small landowners, most of whom have other jobs. Deseret and others were already selling permits to hunt on their private ground, but there was no financial assistance to the landowners of the elk's winter range. The group developed a plan to manage the area as one year-round hunting unit.

A meeting was called with five landowners, those being negatively affected by elk and those making money from elk. They came up with by-laws, deciding that they would establish a fund for land improvement and projects throughout the 600,000 acres defined as the winter range for the elk. The members pay yearly dues based on the amount of land they own. Although they haven't tried to expand their membership, 4 other landowners have asked to become members. "Members" are defined as dues-paying landowners and the local DWR agent, but the BLM and Forest Service cost-share on many projects that affect federal land. The DWR agent has taken charge of the group, following all projects, planning the meetings, etc., there is not a hired facilitator or elected leader. The group meets once a month in the winter, and as often as they can in the summer (every three to four months).

Boise Front Coalition in Boise, Idaho[4]

The Boise Front Coalition was our only urban-proximate partnership in the study, and it is the only one that has disbanded since the survey was distributed. It

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[4]The information on the Boise Front Coalition was provided by Tim Bruer, from the BLM in Boise, Idaho.

began in 1988 when motorcycle enthusiasts initiated dialogue about regulation of activities and access in the Boise foothills. It soon expanded to address problems with all motorized vehicle recreation. Once this conflict was addressed to the members' satisfaction, the Coalition continued discussing other foothill recreation users and needs in the face of development. They sponsored such things as volunteer trail cleanup days. Of the 38,000 acres bordering Boise, ¼ is federal, ¼ is state, and ½ is in private ownership, with the BLM managing one of the largest areas in the center of the acreage.

They used a professional facilitator for the first few meetings to get the group to the point of self-operating. The group developed a few rules themselves. A citizen was elected leader, but the BLM acted as lead agency by mailing announcements, doing the public relations, etc. Every meeting and activity was open to the public, notices were published in the paper. Group size ranged from seven to 40 people, but over 400 people were on the mailing list as interested citizens, including federal and state land management agencies, local businesses, enviromental organizations, trail users, landowners, and university faculty. Meetings were once a month, excluding summer months. There was a lot of turnover in active membership. After the initial issues was addressed, many lost interest. Others dropped out because of the contentious meetings, as some felt a few individuals inhibited group productivity. Toward the mid 1990's the Forest Service and the BLM started to be wary of Federal Advisory Committee Act (FACA)

limitations and regulations and the BLM stopped mailing information to participants. As agency support diminished, citizens stopped attending meetings, finding other more interest driven interest groups to voice their opinions in this growing suburban area.

Shoshone Basin Planning Committee CRM in Burley, Idaho[5]

The Shoshone Basin Planning Committee CRM was formed to resolve some long standing conflicts between livestock and sage grouse habitat needs. The group is primarily concerned with developing a management plan for a 31,670 acre BLM grazing allotment (61%) that has some private (34%) and state (5%) land interspersed. The BLM, who established the group in 1994, solicited permittees of the allotment and others who are directly involved. There are currently 15 members, including the BLM, NRCS, state land and wildlife agencies, livestock permittees, and one upland game hunter. The Forest Service and an enviromental group declined invitations to participate. The members set up their own ground rules. For example, the meetings are open during discussion, but are closed when actual decisions are made. Discussion is limited to the members of the group; no name calling; regular attendance. Three federal agency employee members who have had some training act as facilitators as needed. No member has been

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[5]The information regarding the Shoshone Basin CRM was provided in a telephone interview with Paul Makela, the BLM Wildlife Biologist involved with the CRM.

designated as a leader, although the BLM is the "lead agency," sending out mailings, providing maps, etc. Their goal is to meet once a month, but they met twice a month while starting. They have also formed some subcommittees.

A conflict threatened the cooperation of the group in January 1997. The CRM's "agency subcommittee," made up of all agency employees, developed a preliminary management proposal that the permittees didn't like. The group met until March, and then were unable to meet until July, leaving the issue unresolved. At the time of writing, they were trying to resolve the issue.

The Muddy Ridge CRM in Central Wyoming[6]

The Muddy Ridge CRM was formed as a reaction to a possible shift in ownership and management of 54,000 acres of unirrigated Bureau of Reclamation (BuRec) rangeland. The land was managed by the Wyoming Game and Fish Department, controlled by the local irrigation district, and leased by the local grazing association--all at the same time. In the early 1990's, the BuRec tried giving the land to the BLM, which turned them down. So BuRec considered giving it back to the Indian tribes from whom the land was purchased in 1916. This worried grazing permittees who feared losing their grazing rights. The permittees' solution was to keep the land in the Bureau of Reclamation's hands, and help them manage it

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[6]The information on the Muddy Ridge CRM was provided in a telephone interview with Kirk Faught, the University of Wyoming county Extension Agent involved in the CRM.

through the Muddy Ridge CRM. The CRM process was suggested by the county Extension agent when approached by the permittees.

The permittees invited all those whom they thought would have an interest to their first meeting in 1993 and meetings have always been open to anyone interested. Twenty organizations ended up staying involved in the CRM, including the Bureau of Reclamation, NRCS, and the Soil and Water Conservation District, and several Indian tribes. They have followed CRM procedures with some "deviations." Instead of operating by consensus, they recognize one vote per organization when making decisions. Therefore, they may have 4 people from one organization involved, but they are all recognized as one vote. Some original participants and organizations have lost interest, such as all tribes except one. The group started out meeting twice a month, later decreasing their frequency as needs changed--currently they meet every three to four months. The county Extension agent, who has had some state training, facilitated the first few meetings. The members have since elected another leader, but the members still look to the Extension Agent to take charge sometimes. He currently serves as secretary--taking minutes, sending out mailings, etc.

The Red Canyon Ranch CRM near Lander, Wyoming[7]

The Red Canyon Ranch was acquired by The Nature Conservancy (TNC) late in 1993, and they began organizing a CRM partnership almost immediately. TNC felt that they were managing for a multiple set of values and what they did at Red Canyon generated a lot of interest, so they began the CRM to gather broader ideas toward managing their 35,000 acres, as well as surrounding federal, state, and private land. TNC's caretakers of the ranch determined the stakeholders and invited them to attend, including federal, state, and county land management agencies, state and federal wildlife agencies, neighbors, and ranchers that share their grazing permits. They also included some non-local ranchers and merchants. Additional members were added as other people became involved. When the group began meeting, they spent four days defining their goals.

They do not usually employ outside mediators, but have used one on two or three occasions. Several members have had some facilitator or mediator training, but rarely need to use their skills, as contentiousness is not high. The partnership follows the published CRM process, including consensus decision-making. The partnership has a chairperson-ship which rotates, and partners volunteer to perform this duty as needed. The group consists of over 20 partners, and they have smaller working groups of approximately seven.

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[7]The information on the Red Canyon Ranch CRM was provided in a telephone interview with Bob Budd, TNC caretaker of the ranch.

The Toiyabe Wetlands and Watershed Team near Austin Nevada[8]

The Toiyabe Wetland and Watershed Management Team (TWWMT) started in 1987 by a ranching family, the Tiptons. They decided that to manage for a whole ecosystem, they should involve everyone interested in the management and planning of the 40,000 acres of BLM and Forest Service cattle allotments and their private ground. Together with a professional facilitator, the Tiptons sent more than 200 invitations to representatives from enviromental organizations, government agencies, and cattle associations. Meetings and field days were open to everyone, and were often attended by other ranchers, media representatives, etc., but there are about 23 core people who always attended and participate. These participants were from agencies, including several BLM districts and the Forest Service, representatives from the Nevada Farm Bureau, Nevada Department of Wildlife, Sierra Club representatives, as well as other permittees, landowners, and interested citizens.

Their facilitator usually directs their meetings, and they meet at least four times a year, with less formal meetings held as needed. They've based their group on the Holistic Resource Management "thought model," where cattle is used as an important land management and improvement tool. However, they have defined their own goals regarding land health and improvement, and have found that

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[8]The information on the TWWMT was provided in a telephone interview with Tony Tipton, former co-owner of the Carter Ranch. Mr. Tipton currently runs cattle near Carson City.

focusing on the people first helps they achieve their goals. The team developed a common goal and based management actions against that goal.

In 1997, the Tiptons decided to move near Carson City, Nevada. They lost considerable money in the move, but felt it was necessary because the Austin Forest Service was not willing to risk alternative management methods for the sake of healthy land. They said the policies and regulations limited the Forest Service representatives from becoming a complete member of the team. Their team still meets, but the membership has changed slightly. The representatives from the BLM and State agencies changed because of jurisdiction, but the citizens who once traveled to Austin for meetings still attend Carson City meetings, including the Sierra Club representatives. They now run their cattle on 300,00 acres of BLM land, and the BLM seems more enthusiastic to try different things.

APPENDIX C:

THE SURVEY INSTRUMENT

SURVEY OF PARTICIPANTS

We would like to know about how you feel the meetings and progress of the partnership. Please indicate how strongly you agree or disagree with the following statements by circling the corresponding numbers.

	Strongly Agree	Somewhat Agree	Slightly Agree	Neutral	Slightly Disagree	Somewhat Disagree	Strongly Disagree
The goals for this partnership are realistic.	52%	37%	5%	2%	2%	2%	0%
When we meet, we get right to work on important issues.	14%	39%	22%	9%	7%	4%	4%
Sometimes we spin our wheels and don't accomplish much.	21%	33%	17%	8%	3%	12%	5%
I believe the government agencies involved are willing to share their decision-making responsibility.	22%	33%	17%	7%	9%	4%	7%
I believe the relevant government agencies will use the information generated in this partnership.	40%	29%	17%	8%	3%	1%	2%

Please describe the most important purpose of your group _____

How well were the **objectives** for forming this partnership defined from the beginning?
A. Not at all (1%) B. Not very well (8%) C. Adequately (51%) D. Very well (40%)

The size of the land area covered by this partnership is _____.
A. Much too large (2%)
B. Slightly too large (12%)
C. Just the right size (75%)
D. Slightly too small (8%)
E. Much too small (3%)

Compared to other interests, local needs and concerns are considered _____ to this partnership.
A. Much more important (12%)
B. More important (21%)
C. As important (59%)
D. Less important (5%)
E. Much less important (3%)

Are you able to **voice your opinion** when you want to?
A. All the time (69%)
B. Most of the time (25%)
C. About half of the time (6%)
D. Rarely (0%)
E. Never (0%)

How much influence do you feel you have in the group?

A. A lot (11%)
B. More than most (12%)
C. As much as everyone else (65%)
D. Less than most (6%)
E. Not very much (5%)
F. None at all (0%)

	Strongly Agree	Somewhat Agree	Slightly Agree	Neutral	Slightly Disagree	Somewhat Disagree	Strongly Disagree
We don't vote, but rely on compromise and agreement.	34%	40%	8%	6%	5%	4%	2%
This partnership is worth my time.	44%	27%	15%	6%	2%	4%	2%
This process is not a good way to get my views incorporated into management.	1%	7%	9%	10%	6%	30%	36%
This partnership process will lead to fairer decisions than without the process.	48%	26%	8%	12%	2%	1%	2%
I feel like I have some control over what happens during meetings.	27%	38%	13%	15%	4%	2%	2%

As a result of this process, I am personally _____ than I was before it began.

A. Much better off (25%)
B. Somewhat better off (40%)
C. No better, No worse off (24%)
D. Somewhat worse off (5%)
E. Much worse off (0%)

As a result of this partnership, the land is _____ than it was before it began.

A. Much better off (38%)
B. Somewhat better off (40%)
C. No better, No worse off (19%)
D. Somewhat worse off (1%)
E. Much worse off (1%)

	Strongly Agree	Somewhat Agree	Slightly Agree	Neutral	Slightly Disagree	Somewhat Disagree	Strongly Disagree
There is a lot of give and take among all the participants.	25%	36%	23%	4%	4%	4%	3%
Some people are more influential than others.	32%	42%	14%	6%	2%	1%	3%
My personal objectives are being met by this partnership.	21%	42%	10%	16%	4%	4%	3%
The group's objectives are being met by this partnership.	25%	47%	11%	6%	2%	5%	3%

	Strongly Agree	Somewhat Agree	Slightly Agree	Neutral	Slightly Disagree	Somewhat Disagree	Strongly Disagree
Participants are not willing to provide the necessary information to the group.	5%	7%	3%	11%	13%	32%	29%
The members of the group are committed to our decisions.	17%	44%	13%	10%	5%	9%	2%
I do not feel respected by the other participants.	2%	3%	4%	13%	5%	34%	39%
I respect most of the participants.	44%	36%	10%	2%	1%	3%	4%
I have personality conflicts with at least one of the members.	17%	12%	20%	13%	3%	13%	24%

How often are you interrupted when you speak?

A. Never (16%)
C. About half the time (7%)
E. Most of the time (2%)
B. Rarely (74%)
D. Often (1%)

How many people in your partnership are from the local affected area?

A. All (20%)
C. About half (22%)
E. A few (7%)
B. More than half (33%)
D. Less than half (15%)
F. I don't know (3%)

How often do you feel that <u>you</u> are knowledgeable about the issues discussed among the group?

A. Rarely (0%)
C. About half the time (15%)
E. Always (13%)
B. Less than half (3%)
D. Most of the time (70%)

How often do you feel that <u>other group members</u> are knowledgeable about the issues discussed among the group?

A. Rarely (0%)
C. About half the time (31%)
E. Always (4%)
B. Less than half (5%)
D. Most of the time (60%)

Finally, we would like to know more about you.

What is your year of birth? _____

Are you (85%) male or (15%) female?

What is the highest level of formal education that you completed (circle ONE)?

(0%) Less than 12 years of formal education
(4%) Completed high school
(0%) Vocational courses at a technical school
(18%) Some college
(33%) Completed college
(28%) Some graduate school
(17%) Received advanced degree

How close do you live to the geographic area the partnership discusses (check ONE)?

(51%) 0-20 miles
(18%) 21-50 miles
(10%) 51-100 miles
(11%) 101-150 miles
(12%) over 151 miles

How long have you lived at your present location (check ONE)?

(22%) 1-5 years (23%) 6-10 years (25%) 11-20 years (29%) over 20 years

How long has your family lived in the place where you live now?

(77%) I am the first generation to live here
(7%) My parents lived here
(10%) My grandparents lived here
(7%) Longer than my grandparents

Do you own land in the area of the partnership?

(24%) yes (76%) no

Do you lease land in the area of the partnership?

(17%) yes (83%) no

Do you manage land *(or other resources)* within the partnership area for a government agency or other organization?

__ yes __no

What is the role that brought you into this partnership (check only ONE)?

(17%) rancher
(9%) concerned citizen
(4%) state land manager
(1%) county agent
(3%) environmentalist
(7%) NRCS employee
(9%) wildlife biologist
(28%) BLM or Forest Service employee
(18%) other _____

What percentage of your total household income is dependent on the income generated from the role you indicated in the above question.

(33%) 90-100%
(15%) 75-89%
(15%) 50-74%
(11%) 25-49%
(27%) 0-24%